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(54) **MULTIMODAL ADAPTIVE USER
INTERFACE FOR A PORTABLE
ELECTRONIC DEVICE**

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(57) **ABSTRACT**

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A multimodal electronic device (100) includes a shutter enabled dynamic keypad for presenting one of a plurality of keypad configurations to a user. Each keypad configuration, which is presented by an optical shutter (204) that opens or closes windows or shutters that are geometrically configured as alphanumeric or device keys or symbols. Each keypad configuration comprises a plurality of mode based actuators, wherein the plurality of mode based actuators comprises at least a ten-digit keypad actuator set (2000) and a curved scroll device (1903). The optical shutter (204) is a low-resolution display that presents user actuation targets to a user in a low-resolution key area. As each mode of the device changes, the corresponding keypad configuration presented changes accordingly.

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